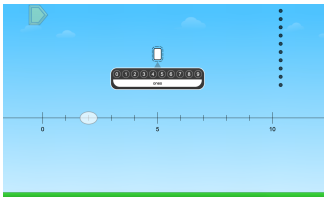
PUZZLE TALK

Kindergarten | **Introduction to the Number Line** | **What's the Number?**

Materials

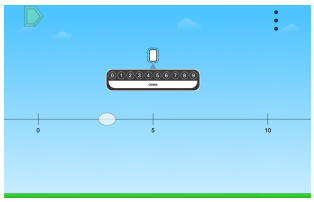
White boards and markers
Double Ten Frame game mat
Beans or two-color counters

Directions



- Show a puzzle in Level 1. Ask students, "What do you see? How can we clear a path for JiJi?"
- Ask students to decide which number they think would go in the empty spot on the number line and why.
- Say, "Turn to your neighbor and explain how you decided which number should go in that spot." Discuss greater than/less than strategies and other strategies students may have used for determining the missing number.
- Display the next puzzle. Have students write the missing number on their white boards. Say, "Turn and talk to your neighbor and share your answer. Talk about why you and your partner agree or disagree on the answer."

- Show a puzzle in Level 2. Give each student the Double Ten Frame game mat and beans or two-color counters. Decide as a class what number goes on the number line.
- Have students count out the number of counters that is the same as the number the class thinks should be placed on the number line in the puzzle.
- Have students place the counters in their ten frame. Ask students, "How many more counters are needed to make ten? How do you know?" Repeat with the remaining puzzles in Level 2.



Sample Questions

- How did you decide what number goes at that spot on the number line?
- What do these tick marks (small lines) represent? How do you know?
- Is this number greater than or less than____?
- What number is 1 more than this number on the number line?
- What number is 1 less than this number on the number line?
- How many beans/counters do you need to show this number? Show me. Place the counters in the ten frame.
- How many more would you need to make 10? How do you know?
- How can we prove the number we put on the number line is the same as the number we put in the ten frame?

What to look for

How does the student:

- interpret the number represented by a location on the number line, counters, and number of places taken up in the ten frame? (Do they understand all represent the same amount?)
- use the number line to compare numbers? (Do they understand that numbers decrease as you move left on a number line?)
- determine the missing number on the number line? (Do they start at 0 and count every line? Do they use 5 to start, if applicable?)